REMARKS

This responds to the Final Office Action mailed on January 2, 2009 and the advisory action dated March 19, 2009.

Claims 1, 11, 21, and 22 are amended, no claims are canceled, and no claims are added; as a result, claims 1 to 22 are now pending in this application.

§101 Rejection of the Claims

Claims 1-10 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. In response, Applicants have amended claims 1 to 10 to clarify that the computer-implemented system includes "a processor and memory for executing modules of programming code" is being claimed. Since a computer-implemented system a processor and memory for executing modules of programming code is being claimed, the claims now cover patentable subject matter. Withdrawal of the rejection under 35 U.S.C. § 101 is respectfully requested.

§ 102 and 103 Rejection of the Claims

Claims 1-3, 5, 8, 10-13, 15, 18 and 20-22 were rejected under 35 U.S.C. § 102(e) as being anticipated by Harding et al. (U.S. Publication No. 2005/0144052, hereinafter referred to as the Harding reference). Claims 4 and 14 were rejected under 35 U.S.C. § 103(a) as being obvious over Harding in view of Cheng et al. (U.S. Publication No. 2002/0059130, hereinafter referred to as the Cheng reference). Claims 6-7 and 16-17 were rejected under 35 U.S.C. § 103(a) as being obvious over Harding. Claims 9 and 19 were rejected under 35 U.S.C. § 103(a) as being obvious over Harding in view of "www.amazon.com" (October 18, 2000, hereinafter referred to as the Amazon reference). The Applicants respectfully traverse. The Applicants submit that the independent claims of the present application are not anticipated by nor rendered obvious in view of the Harding reference.

Before directly addressing the Examiner's rejections, a brief review of the system disclosed in the present patent application is desirable. The present disclosure is directed at a

method and system to detect outlying behavior in a network-based marketplace. In order to detect "outlying behavior", one must first determine what normal behavior is such that severe deviations from that normal behavior ("outlying behavior") can be detected. The disclosed system determines what normal behavior is by calculating information about the behavior of its peers ("peer information"). In one embodiment, the peer information is computed by combining together the attribute information of a plurality of sellers. Specifically, in the embodiment disclosed in paragraph [0058] of the written specification and claimed in claim 6, the combined attribute information of the peers is in the form of a standard deviation and a mean. The system compares the attributes of an individual seller (the sellers behavior) against the computed peer information (the behavior determined to represent 'normal' behavior) to determine if that individual seller is an outlier from its peer sellers. A detection module determines if the results of the comparison constitutes an outlier.

The main reference cited by the Examiner is the Harding reference. The Harding reference discloses a system for profiling item sellers to inform item purchasing decisions and build trust in a multiple-seller marketplace. As set forth in paragraphs [0026] to [0028] of the Harding reference, the system of the Harding reference calculates statistics for each the sellers by combining a set of n different qualitative measures collected for each seller. On page 4 of the Examiner's response, the Examiner stated "Examiner construes the second group to be a subset of the first group and paragraph [0026] disclosures computing statistics for the sellers. Although statistics are calculated for the 'sellers' in the Harding reference, the statistic calculated are statistics for the **individual** sellers and not "peer information computed by combining together the attribute information of" a plurality of sellers as required by the amendment claims. Specifically, Paragraph [0028] of the Harding reference provides a specific equation that combines various different qualitative measures for a specific **individual** seller into a combined score for that specific seller. This score represents an absolute value made up of individual qualitative measures associated only with that particular seller. Thus, the Harding reference fails to disclose any statistic calculated by combining together attribute information on a plurality of different sellers.

Furthermore, the system of the <u>Harding</u> reference fails to disclose any comparison against its peers at all! Step **604** in **Figure 6** of the <u>Harding</u> reference specifies that "based upon a determined score, determine whether seller is a recommended seller". This is more explicitly set forth in paragraph [0042] of the <u>Harding</u> reference that states:

> [0042] In step 604, based upon the score determined in step 603, the facility determines whether the seller should be designated as an recommended seller. In some embodiments, **this involves comparing the score determined for the seller to a minimum seller score threshold. For example, where the facility utilizes a seller score threshold of 80, those sellers having scores greater than 80 (or, alternatively, greater than or equal to 80) are designated as recommended sellers.** In step 605, the facility loops back to step 602 to process the next seller. In step 606, the facility loops back to step 601 through repeat the process of rating the sellers at a future time.
>
> (Emphasis added)

In the system of the <u>Harding</u> reference, the determination of whether one is a 'recommended seller' is made by a simple comparison with an arbitrary fixed threshold selected by the designers of the system. This is completely different than the comparison to peer information as required by the present claims using "peer information computed by combining together the attribute information of" a plurality of sellers. Such a simple rule-based system is the type of system that the system of the present application improves upon. In fact, the background of the present application noted the short-comings of such systems. Specifically, paragraph [0003] of the written specification of the present patent application states:

> One approach for identifying outlying behavior has been to establish a rules base system. The behavior of buyers and sellers are compared against the rules to detect outlying behavior. Operators will usually have some immediate success with such systems but have found, by experience, that the effectiveness of a rules base system will typically diminish with time. For example, a rules based system to identify fraudulent activity will decrease in effectiveness as the perpetrators of the fraudulent activity become aware of the rules and adjust their behavior to avoid detection."

The examiner attempts to read in a comparison of a seller to its peers into the <u>Harding</u> reference Specifically, on page 4 of the final office action dated January 2, 2009, the examiner stated:

> (¶ 42 discloses comparing scores of the seller to a minimum seller score threshold to determine if sellers are recommended sellers or not, <u>where the comparison is done against other sellers that do or do not exceed the minimum seller score</u>

PRELIMINARY AMENDMENT
Serial Number: 10/822,894
Filing Date: April 12, 2004
Title: METHOD AND SYSTEM TO DETECT OUTLYING BEHAVIOR IN A NETWORK-BASED MARKETPLACE

Page 10
Dkt: 2043.127US1

threshold; e.g. a seller is considered to be recommended in comparison to other sellers who do not have scores high enough to be considered recommended sellers);

However, no such comparison between score of one seller and the score of any other seller is disclosed in paragraph [0042]. The only comparison done is between the score of a seller and an absolute "minimum seller score" that is arbitrary determined. Thus, there is no comparison at all between the different sellers.

Since the <u>Harding</u> reference fails to disclose the claimed system that calculates and uses "peer information computed by combining together the attribute information of" other sellers (a relative system based upon comparing a seller to its peers), the present invention, as claimed in the amended claims, is allowable over the <u>Harding</u> reference. Furthermore, neither the <u>Cheng</u> nor the <u>Amazon</u> references cited by Examiner disclose this relative system based upon comparing a seller to its peers. The dependent claims include all of the limitations of the independent claims and are thus likewise allowable.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's representative at (408) 278-4058 to facilitate prosecution of this application.

If necessary, please charge any additional fees or deficiencies, or credit any overpayments to Deposit Account No. 19-0743.
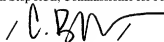
Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(408) 278-4058

Date 4/2/2009   By

Dag H. Johansen
Reg. No. 36,172

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on April 2, 2009.

Chris Bartl
Name   Signature